

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: North Bolivar School District

Prepared By: Cheryl Arnold Ms. Forestry Commission

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-02-15

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

**Property Name: S16-T24N-R5W** 

# TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	7
STANDS	7
PLAN MAP	9
PLAN MAP	10
STAND ACTIVITY SCHEDULE	11

### LANDOWNER INFORMATION

Name: North Bolivar School District

Mailing Address: Box 28

City, State, Zip: Shelby, MS 38774
Country: United States of America

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# FORESTER INFORMATION

Name: Cheryl Arnold, Service Forester

Forester Number: 01662

Organization: Ms. Forestry Commission

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148 N. Edison St.

City, State, Zip: Greenville, MS 38702

Contact Numbers: Office Number: 662-332-3358

Fax Number:

E-mail Address: carnold@mfc.state.ms.us

## PROPERTY LOCATION

County: Bolivar Total Acres: 627 Latitude: -90.72 Longitude: 33.93

Section: 16 Township: 24N Range: 5W

### DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

### INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

# **OBJECTIVES**

### Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

### Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone.

### PROPERTY DESCRIPTION

# General Property Information

This section is located between Winstonville and Shelby in Northern Bolivar County. Its approximately two miles east of highway 61 on sixteenth section road which borders the property on the north. Prentiss Mill road borders the section on the west and Granger Dorsey road borders the property on the west. There are two drainage ditches that run through the section. Section 16-24-5 contains 469.97 acres of agricultural and nonforest land. It contains 156.97 acres of forest land.

### Water Resources

Perennial water resources were identified during a reconnaissance of the property. However, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices. The two unnamed drainage ditches on the section eventually empty into Mound Bayou drainage canal.

### Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

# Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property. However, if any plant or animal on the endangered/threatened list should be found, special management considerations will be applied to the protect the plant or animal.

# Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and

other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

### Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Dowling Clay (Dc).

### Archeological and Cultural Resources

These areas can include churches, cemetaries, Indian Mounds, old home sites and other areas of historical significance. No archeological or cultural resources were identified during the reconnaissance of the property. However, if any should be found in the future, special management measures will be applied immediately to preserve these sensitive areas.

### GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy and vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- · Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

### Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

### Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

### **Boundary Lines**

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

**Note:** Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

### Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

### Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

### Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has be degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

# Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

### Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

### Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining

access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

# Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

### Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

### **SOIL TYPES**

### Soil Description

Dowling Clay is a dark colored, poorly drained soil consisting of firm clay throughout. It occupies depressions or abandoned channels of streams, generally in association with other soils. After each rain it receives water from the surrounding slopes. It remains wet longer than most of the soils. The native vegetation was bottomland hardwoods and cypresses along with a dense growth of vines, canes, and underbrush.

### **STANDS**

### Stratum 1

Strata 1 consists of all 156.97 acres of forestland. Stand #2 contains 12.84 acres. Stand #4 contains 33.65 acres. Stand #5 contains 4.1 acres. Stand #7 contains 77.9 acres. Stand #8 includes 0.68 acres. Stand #10 includes 5.01 acres. Stand #11 includes 20.94 acres. Stand #13 includes 1.07 acres. Stand # 14 includes 0.78 acres. All the stands are very similar in age, volume, and species.

# Stand Description

The stands in stratum one are approximately 69 years old. They contain about 74 square feet of basal area per acre and 109 trees per acre. The volume within the stands is 16 tons of sawtimber and 23 tons of pulpwood to the acre. Species found include Cypress, Sweetgum, Sugarberry, Elm, Ash, Pecan, and Oak.

# Stand Recommendations

These stands will be monitored closely for fire, insect, and disease control. Any harvesting activity will be closely monitored as well. Stand #7 will be examined for a 77.9 acre final harvest in 2014.

### **Activity Recommendations**

A final harvest cut containing 77.9 acres will be done on stand #7 in the year 2014. The tract will be regenerated the following year in 2015. The Mississippi Forestry

Commission will artificially regenerate the stand with Oak seedlings to achieve a better stand in the future.

# Regeneration

77.9 acres will be handplanted at a rate of 302 trees per acre on a 12 by 12 spacing in the year 2015. Site prep will be done as needed prior to planting. Species included will be Nuttall Oak, Overcup Oak, Willow Oak. Seedlings should be at least 18 inches in height and will follow all Mississippi Forestry Commission guidelings for planting.

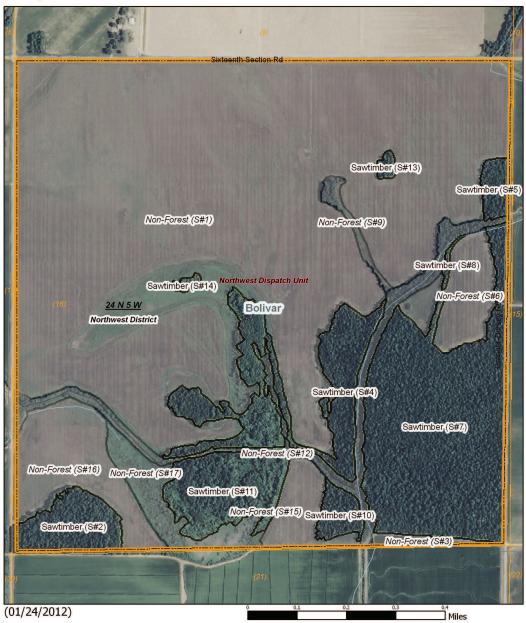
### Harvest

A final harvest of 77.9 acres will be done in the year 2014. The tract will be monitored regularly while harvesting is in progress by Mississippi Forestry Commission personnel.



# 16-24-5 North Bolivar School District 2012 to 2021 626.94 Acres

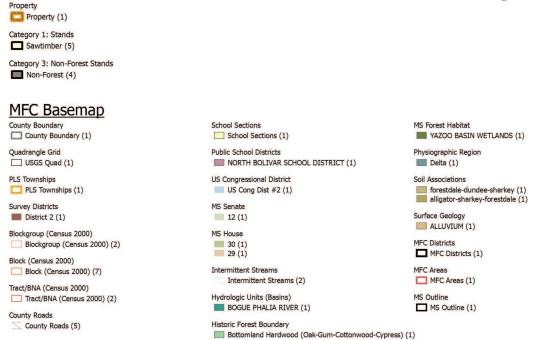




### **S16 T24N R5W**

# S16 T24N R5W Bolivar County North Bolivar BOE





# Stand Activity Schedule for North Bolivar School District 16 24N 5W

Strata	Stand	Activity		Acre	Est. Cost	Est. Revenue
2014						
1	7	Harvest, Mechanical, Final, Machine,	Harvest, Mechanical, Final, Machine, Misc Hardwood		\$2,730.00	\$33,930.00
			Yearly Totals	78	\$2,730.00	\$33.930.00
2015						
1	7	Regeneration, Artificial, Plant, Hand	Regeneration, Artificial, Plant, Hand, Misc Red Oak		\$9,750.00	\$0.00
			Yearly Totals	78	\$9,750.00	\$0.00
			<b>Grand Totals</b>	156	\$12.480.00	\$33.930.00